

FACTORS OF RECURRENCE OF GIANT CELL TUMORS OF BONE (TCG) ABOUT 25 CASES

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ABSTRACT

Surgical complications of giant cell tumors (GCTs) are frequent, recurrence being the best known and most studied cause, but the other causes of failure have been little investigated. We also conducted a retrospective study about 25 cases to determine the main causes of revision surgery in patients operated on by TCG, and the respective share of each of the etiologies of the revisions.

KEYWORDS: TCG- Recurrence.

A) INTRODUCTION

The surgeon, after having confirmed the diagnosis of a TCG, immediately wonders about the possible evolution of this tumor.

This tumor can degenerate at any time into sarcoma and can in a large number of cases recur while retaining its benign characteristics. The aim of our work and to expose the factors favoring bone and local recurrences of TCG.

B) MATERIEL AND METHODES

This is a retrospective study that includes 25 cases of recurrence of GCT initially treated surgically and then having recurred in the bone or soft tissues treated in our department between 2018 and 2022.

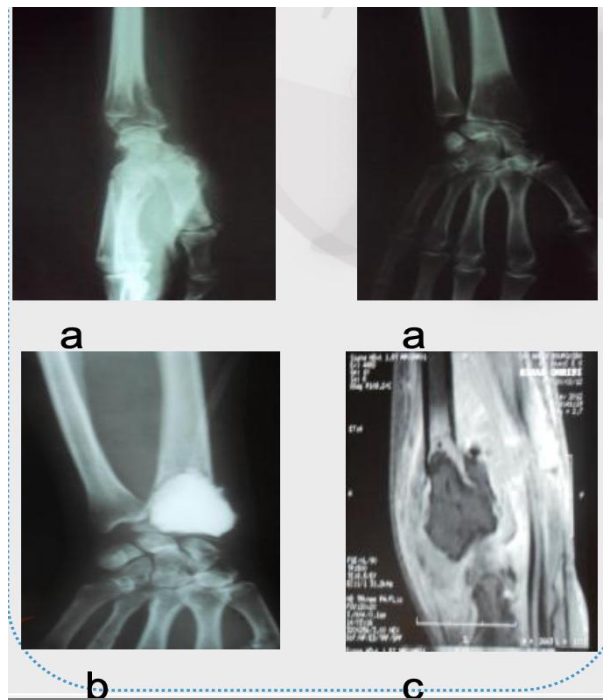
C) RESULTS

- 8 patients presented a recurrence, that is 32%.
- The mean time to recurrence was 12 months with extremes of 2 months going to 60 months.
- The lowest recurrence rate was at the femoral location.
- The highest recurrence rate was for stage IB.
- Recurrence was more frequent with the active form.
- Campanacci radioclinical stage II tumors had the highest recurrence rate.^[9]
- The greatest recurrence rate was with Jaffe Listenstein pathological stage II.
- The highest recurrence rate was observed with simple curettage.

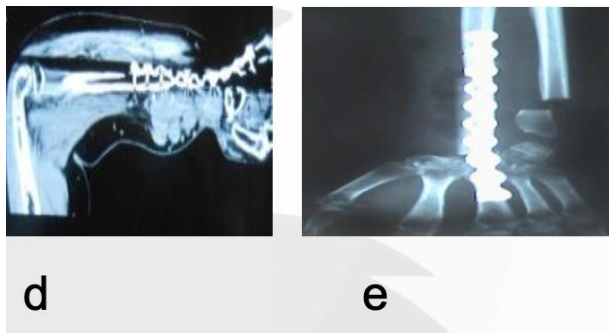
D) DISCUSSION

A reappearance of pain in the area already treated raises the suspicion of tumor recurrence.^[1,2,3]

The diagnosis of these recurrences is essentially dependent on the initial treatment of the tumor and the quality of the initial excision, the invasion of the soft tissues, the advanced radiological stages.^[4,5]



- Osteolytic image of the metaphyseal epiphyseal seat blowing the antero-external cortex.
- b-Curettage filling with cement.
- Recurrence at 7 months
- Scaphoid and semilunar resection and arthrodesis
- e-Recurrence in the soft tissues



According to the world series, the cumulative probability of recovery at 10 years was 36% for a tumoral cause, 26% for a mechanical cause, and 13% for an infectious cause.^[6]

The surgeon, the type of reconstruction, an extension in the soft tissues were associated with the risk of revision surgery whatever the cause.

The type of oncological treatment (curettage or resection) and the type of reconstruction were associated with the risk of mechanical revision.

Tumor size and tumor site were associated with the risk of revision due to infection.^[7,8]

It is advisable to monitor patients for as long as possible to detect recurrence or sarcomatous degeneration.

Recurrences of TCG in the soft tissues are rare. Extrachou explains the occurrence of these recurrences by peroperative seeding during the initial treatment of TCG.

E) CONCLUSION

Despite recent studies about the recurrence factors of GCT, this subject remains a mystery yet to be explored by further research. When informing the patient, it is important to report all the risks associated with the treatment of GCT and not just the risk of local recurrence. Among these risks, some are associated with modifiable variables, including the surgeon, the choice of oncological treatment and the mode of reconstruction.

Consent

The patients have given their informed consent for the case to be published.

Competing Interests

The authors declare no competing interest.

Authors 'Contributions

All authors have read and agreed to the final version of this manuscript and have equally contributed to its content and to the management of the manuscript.

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